

coffee, chocolate may be used advantageously; it is not a drug; it possesses no remedial powers, in the proper sense of the word; it is only alimentative, nourishing by its natural oil and substance. . . .

. . . California has never seen so great a mortality as within the last year, among the strangers who arrived recently; and some would lay the blame to the climate. We, however, would deny it in toto, and assert it is the fault of the patient and his physician in most cases. The diseases that may be said to be incident to the climate, are tractable, and we had the good fortune to lose not a single case as yet, be it diarrhea, dysentery, fever and ague, or what may be called California fever—a confused type of all fevers. But we have treated our patients a little differently from the routine practice, from the injunctions of books and professors. . . .

. . . In fever and ague, we are not fond of using much sulphate of quinine, except merely to interrupt the periodicity of the disease, for which great doses are not required; this done, we cleanse the bowels thoroughly, then pay attention to the diet, which should be nourishing but light. A strict attention on the part of the patient to this rule, for two or three weeks, improves him rapidly, and guards against a relapse. Under such a course of treatment as we have here briefly indicated, and which an experienced physician can easily comprehend, our patients recover without much delay. And it is our inmost conviction that the diseases of the country are not at all formidable, if properly managed; and that the climate is not the cause of the mortality that lately has been committing such a havoc in the ranks of the strangers. In our opinion, the climate of California is one of the most healthy, as a general rule, if people understand how to adapt themselves to it. . . .

. . . There is always a class of people who find fault with any climate, because it is the most convenient cloak for their follies, or an excuse for their ignorance in the art of preserving health. . . .

## EDITORIAL COMMENT\*

### IMMUNOLOGIC EFFECTS OF ALKALINE DIETS

#### IX†

Several special diets have been proposed as adjuvants in the treatment of certain chronic infections, the purpose of which is a therapeutic alteration in acid-base equilibrium. Thus far, however, such dietary therapies have been largely empirical, few immunologic studies of acid-base equilibrium having been made on laboratory animals. Doctor Bonanno's<sup>1</sup> currently reported data are, therefore, of basic interest.

Rabbits and guinea-pigs were used by the Turin investigator, their normal acid-base equilibrium being altered by the addition of certain calcium or sodium salts to routine diets. The results with the acid diets were in accord with clinical experience: within from fifteen to thirty days there was

a pronounced lowering of phagocytic power and of the bactericidal power of the blood serum, which latter was associated with a reduced complement titer. Anaphylactic susceptibility was increased. Specific antibody production was inhibited.

The results from the alkaline diets, however, were contrary to clinical expectation, since experimental alkalosis was rarely if ever of immunologic benefit to the animal. In a typical test of this type, Doctor Bonanno's control or normally fed guinea-pigs were injected intraperitoneally with a routine dose of low virulent tubercle bacilli; and these guinea-pigs survived, on an average, for ninety-five days. All of the alkali-fed guinea-pigs injected with the same dose died between the twentieth and the forty-second day.

As a general conclusion from his data, Doctor Bonanno was forced to the opinion that any experimental variation from normal acid-base equilibrium is an immunologic disadvantage to normal animals. If this is equally true in clinical medicine, immunologic benefits can be expected only in cases in which the prescribed diets correct preëxisting acid-base abnormalities.

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### PERINEPHRITIS

Perinephritis is generally secondary to infection in the kidney (pyelitis, pyelonephritis, pyonephrosis) and is in proportion to the intensity of this infection. Perinephritis of extra-renal origin is rare. The cure of perinephritis depends upon the eradication of the causative infection in the kidney. Perinephritis is frequently followed by more or less fibrous tissue reaction, with resultant perinephric adhesions or sclerosis. The term "perinephric adhesions," and not "perinephritis," expresses the true pathology after infection has been eradicated from the kidney. Perinephric adhesions, as a rule, have no significance as a cause of pain. In fact, nephropexy is done with the avowed purpose of forming adhesions to hold the kidney in place. Tuberculous kidneys are frequently surrounded by the densest adhesions, yet we frequently find that these patients never have any pain referable to the kidney, just as patients with extremely movable kidney may be entirely devoid of pain. Perinephritis, or more correctly speaking, perinephric adhesions may cause pain under the following conditions: in the adhesions are so formed as to constrict the kidney pedicle, or by contraction of scar tissue to cause torsion or disturb the normal position of the kidney with consequent interference of the renal circulation, or to interfere with urinary drainage by constricting or obstructing the ureter or pelvis of the kidney. The latter presupposes perinephritis associated with peripyelitis or periureteritis. Diagnosis depends upon demonstration by horizontal and vertical pyelography of evidence of dilatation, or interference with the motility of ureter, pelvis or calyces, and the presence or absence of malposition, torsion or immobility of the kidney. In

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<sup>1</sup> Bonanno, A. M.: Zeitsch. f. Immunitätsforsch., 77:59 (Nov.), 1932.